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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,952	05/31/2000	Kousuke Anzai	566.38616X00	2316

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EXAMINER

LE, BRIAN Q

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 06/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/583,952

Applicant(s)

ANZAI ET AL.

Examiner

Brian Q Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-10,12-14,16-18,20-22 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 3, 7, 11, 15, 19, and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-6, 8-10, 12-14, 16-18, 20-22, and 24-26 are rejected under 35

U.S.C. 102(e) as being anticipated by Miyahara U.S. Patent No. 6,341,350.

Referring to claim 1, Miyahara teaches a method embedding digital watermark information (Abstract, first 6 lines) $b_1 - b_n$ ($2 \leq n$) in image data, comprising steps of:

Dividing the image data into a plurality of areas S (The whole figure, 6×4) each consisting of $M \times N$ ($1 \leq M, N$) pixels (FIG. 3);

Defining a plurality of areas G (8×8 block) each consisting of $P \times Q$ ($1 \leq P, Q$) of the areas S (FIG. 3);

Allocating each of the areas S constituting each area G to some one of: areas $T_1 - T_n$ in which said digital watermark information $b_1 - b_n$ is respectively embedded (the gray blocks) and areas $H_1 - H_m$ ($1 \leq m$) in which information is not embedded (the white blocks)(FIG. 8);

Locating one or more areas T and one or more areas H in a predetermined arrangement in each area G (watermark pattern is a predetermined arrangement) (FIG. 8); and

Locating the plurality of areas G in a predetermined rule (column 5, lines 31-44).

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For claim 2, please refer for claim 1 for the explanation. Furthermore, Miyahara discloses areas $J_1 - J_k$ ($1 \leq k$) in which information $p_1 - p_k$ ($1 \leq k$) specifying an embedding format for embedding said digital watermark information $b_1 - b_n$ in said areas $T_1 - T_n$ (a block where code image data is located) (column 7, lines 45-46 and column 19, lines 10-13).

Regarding claim 4, Miyahara teaches the method of embedding digital watermark information wherein each of said areas G includes a plurality of said areas H that have been allocated so as to be asymmetric (FIG. 3) in vertical and horizontal directions in the area G .

For claim 5, please refer to claim 1 for the explanation. In addition, Miyahara teaches the method of extracting digital watermark information (the detection of watermarking by using decoder and detector) (FIG. 32, elements 21 and 22).

Regarding claim 6, please refer back to claim 2 for the explanation. Also, Miyahara discloses the method wherein recognizing the embedding format of the digital watermark information and extracting the digital watermark information according to the recognized embedding format (formatter provides the format information so that the encoder embeds watermark and decoder/extracts watermark information so that the encoder and the decoder would have the same format configuration) (column 20, lines 24-27).

For claim 8, please refer back to claims 4 and 1 for the explanation. Plus, Miyahara teaches contents of image processing carried out on the image data are judged (column 13, lines 60-63)

For claim 9, please refer to claim 1. Also, Miyahara teaches a program (column 20, line 61) product and a computer readable storage medium (column 9, lines 48-50).

For claim 10, please refer back to claim 2 and claim 9 respectively for the explanation.

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For claim 12, please refer back to claim 4 and claim 9 respectively for the explanation.

Regarding claim 13, please refer to claim 1 and claim 9 for the explanation.

For claim 14, please refer back to claim 6 and claim 9 for the explanation.

For claim 16, please refer back to claims 8 and 9 respectively for the explanation.

For claim 17, please refer to claim 1 for the explanation.

Regarding claim 18, please refer to claim 2 for the explanation.

Regarding claim 20, please refer back to claim 4 for the explanation.

Regarding claim 21, please refer back to claim 1 for the explanation.

Regarding claim 22, please refer back to claim 6 for the explanation.

Regarding claim 24, please refer back to claim 8 for further explanation.

Regarding claim 25, please refer to claim 2 for the explanation. Also, Miyahara teaches the processor (column 6, lines 42) and storage unit (column 20, line 65).

For claim 26, please refer back to claim 22 and claim 25 for the explanation.

Allowable Subject Matter

3. Claims 3, 7, 11, 15, 19, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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CONCLUSION

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to watermarking encode/decode:

U.S. Pat. No. 5,721,788 to Powell, teaches method and system for digital image signatures.

U.S. Pat. No. 6,072,888 to Powell, teaches method for image encoding.

U.S. Pat. No. 6,285,774 to Schumann, teaches system and methodology for tracing to a source of unauthorized copying of prerecorded proprietary material, such as movies.

Michell, Multimedia Data-Embedding and Watermarking Technologies, Proceeding of the I.E.E.E., Vol. 86, No. 6, June 1988.

Jana, Robust MPEG Video Watermarking Technologies, ACM Multimedia'98, UK, ACM 1-58113-036-8/98/0008.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL

June 2, 2003


AMELIA M. AU
SUPERVISORY PATENT EXAMINER
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